

ABSTRACT

A circuit and method are given, to realize a high voltage output driver within a closed regulator loop with slew rate control, insensitive against supply voltage variations. The high-voltage front-end, essentially a slope detector, is implemented as a combination of a voltage-current with a current-voltage transformer circuit, where only very few parts are working in the high voltage domain. Using the intrinsic advantages of that solution the circuit of the invention is manufactured with standard CMOS technology and only two discrete or integrated extended drain MOS components at low cost.